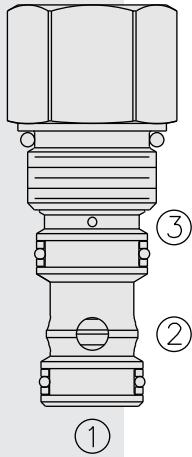


ER10-S30 Pressure Reducing Spool Logic Element



DESCRIPTION

A screw-in, cartridge-style, spool-type, spring-biased, pressure-reducing logic element.

OPERATION

The **ER10-S30** acts as the pressure-reducing element when used in conjunction with a pilot relief valve connected to port 3. The outlet - port 1 - is connected to the spring chamber and port 3 through the orifice in the spool. When the pilot relief valve is closed, the pressure-reducing element is completely open and allows oil to flow from the inlet at port 2 to the outlet at port 1 with minimum pressure drop. On attainment of a pre-determined pressure at port 1, the spool shifts to increase pressure drop between 2 and 1, thereby reducing and maintaining pressure at port 1 equal to the preset pilot pressure at port 3.

FEATURES

- Spring-biased, spool type logic element
- For use in conjunction with a pilot relief valve
- Hardened spool and cage for long life.
- Corrosion-resistant plating option available.
- Industry common cavity.

RATINGS

Operating Pressure: 345 bar (5000 psi); Polyurethane seals are recommended for operation up to 345 bar (5000 psi); Aluminum bodies are rated up to 241 bar (3500 psi).

Proof Pressure: 390 bar (5700 psi)

Flow Rating: See Performance Chart

Maximum Pilot Flow: 5.3 lpm (1.4 gpm)

Bias Spring: 6.9 bar (100 psi)

Temperature: -40 to 120°C with standard Buna seals;
 -26° to 204°C (-15° to 400°F) with fluorocarbon seals;
 -54° to 107°C (-65°F to 225°F) with polyurethane seals

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

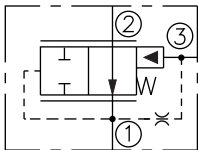
Installation: No restrictions; See page 9.020.1

Cavity: VC10-S3; See page 9.110.1

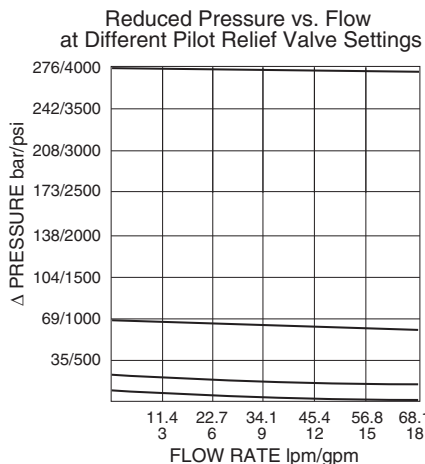
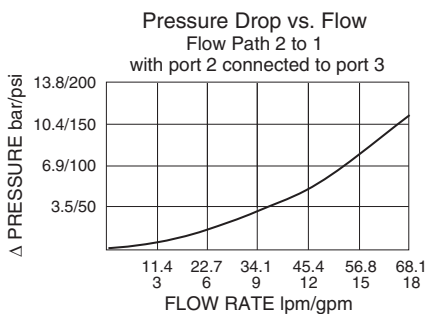
Cavity Tool: CT10-S3XX; See page 8.600.1

Seal Kit: SK10-S3X-MM; See page 8.650.1

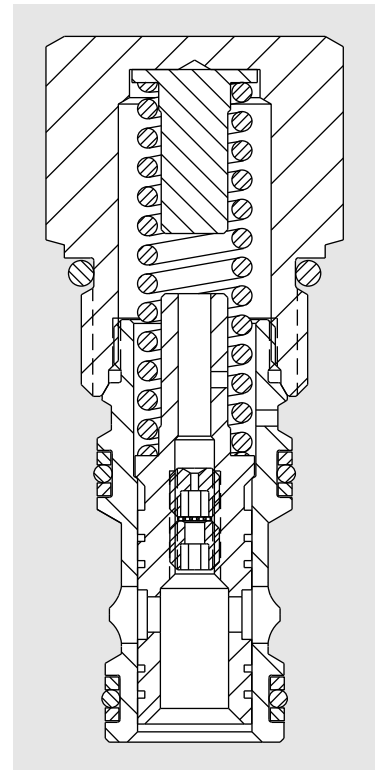
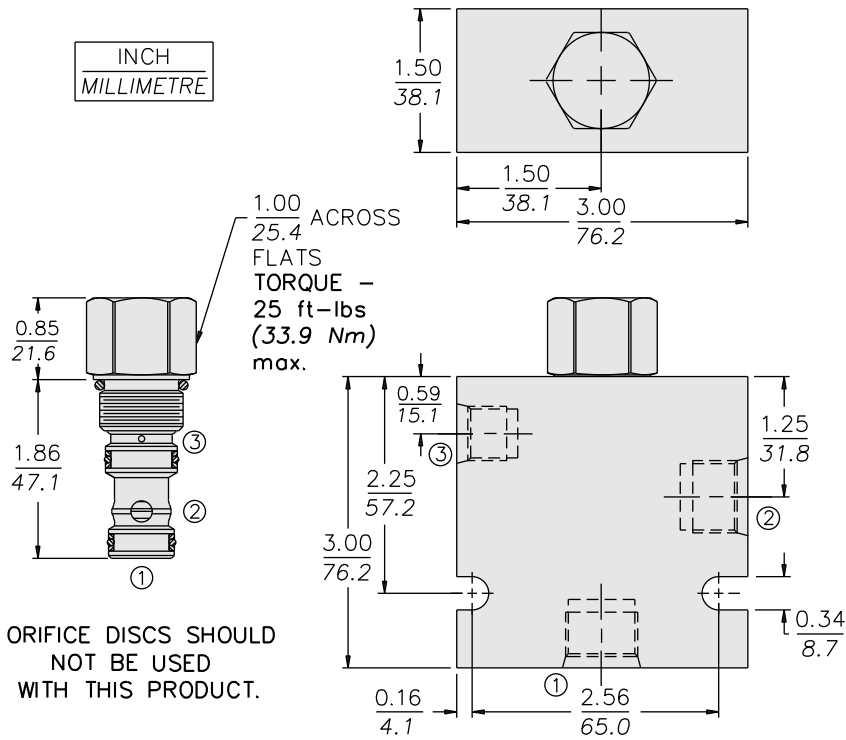
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.27 kg (0.60 lb)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.
Polyurethane seals are recommended for operation over 241 bar (3500 psi).

Ported Body: Weight: 1.27 kg (2.82 lb)
Ductile iron, rated to 350 bar (5075 psi). Aluminum bodies, rated to 207 bar (3000 psi) also available; weight 0.49 kg. (1.08 lb.); dimensions may differ. See page 8.010.1.

TO ORDER

ER10-S30 - -

Porting
Cartridge Only 0
SAE 8 8TD
SAE 10 10T
SAE 10 10TD

Seals
Buna N (Std.) N
Polyurethane P
Fluorocarbon V

Note: Polyurethane seals are recommended for operation over 241 bar (3500 psi)